

What is claimed is:

1. A method for forming different liquid crystal
5 twist angle in a liquid crystal display, wherein an
orientation layer having concave and convex structures is
formed over a substrate of the liquid crystal display,
wherein the recession region of said structure is a first
region and the convex region of said structure is a second
10 region, said method comprising:

applying a first rubbing force to said orientation
layer over said substrate, wherein a first angle exists
between the direction of said first rubbing force and said
adjusted and determined direction; and

15 applying a second rubbing force to said orientation
layer over said substrate, wherein a second angle exists
between the direction of said second rubbing force and
said adjusted and determined direction;

wherein said first angle differs from said second
20 angle.

2. The method of claim 1, wherein said first region
is a reflection region and said second region is a
transmission region.

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3. The method of claim 1, wherein said second region is a reflection region and said first region is a transmission region.

5 4. The method of claim 1, wherein said first rubbing force rubs said first region and second region.

5. The method of claim 1, wherein said second rubbing force only rubs said second region.

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6. The method of claim 1, wherein said first angle is a liquid crystal twist angle required by the first region.

7. The method of claim 1, wherein said second
15 angle is a liquid crystal twist angle required by the second region.

8. A method for forming different liquid crystal twist angles in a liquid crystal display, wherein an
20 orientation layer is formed over a substrate of the liquid crystal display, said method comprising:

using a UV light having a first polarized direction and locating over said substrate to illuminate said orientation layer over said substrate; and

25 using the UV light having a second polarized direction and locating under said substrate to illuminate said orientation layer over said substrate;

wherein said first polarized direction differs from
said second polarized direction.

9. The method of claim 8, wherein the orientation
5 layer formed over said substrate of the liquid crystal
display has concave and convex structures.

10. The method of claim 8, wherein a first angle
exists between said first polarized direction and said
10 adjusted and determined direction.

11. The method of claim 10, wherein said first
angle is a liquid crystal twist angle required by the
reflection region.

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12. The method of claim 8, wherein a second angle
exists between said second polarized direction and said
adjusted and determined direction.

20 13. The method of claim 12, wherein said second
angle is a liquid crystal twist angle required by the
transmission region.

14. A liquid crystal display comprises:
25 a first substrate;
a second substrate;
substrate and said second substrate;

a plurality of reflection regions formed over said first substrate;

a plurality of transmission regions formed over said first substrate;

5 a transparent conductor layer formed said transmission region;

said reflection region including a plurality of reflection electrodes; and

10 an orientation layer formed over said reflection electrodes and said transparent conductor layer, wherein said orientation layer formed over said reflection electrodes has a first orientation direction and said orientation layer formed over said transparent conductor layer has a second orientation direction;

15 wherein said first orientation direction differs from second orientation direction.

15. The liquid crystal display of claim 14, wherein said first orientation direction is adjusted and determined
20 said liquid crystal twist angle between about 70 degrees and 90 degrees.

16. The liquid crystal display substrate structure, of claim 14, wherein said second orientation direction is
25 adjusted and determined said liquid crystal twist angle between about 10 degrees and 70 degrees.

17. The liquid crystal display of claim 14, wherein the orientation layer formed over said first substrate has concave and convex structures.

5 18. The liquid crystal display of claim 17, wherein a first rubbing force is applied to said orientation layer to form a first orientation direction and a second rubbing force is applied to said orientation layer to change said first orientation direction to a second orientation direction.

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 19. The liquid crystal display of claim 14, wherein an UV light with a first polarized direction illuminates said orientation layer to form a first orientation direction and an UV light with a second polarized direction using said
15 reflection electrodes as masks illuminates the orientation layer to form a second orientation direction.